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10/568,582	02/17/2006	Takashi Kikukawa	286321US0PCT	6498
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OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C. 1940 DUKE STREET ALEXANDRIA, VA 22314				
EXAMINER				
BLOUIN, MARK S				
ART UNIT		PAPER NUMBER		
2627				
NOTIFICATION DATE		DELIVERY MODE		
02/26/2009		ELECTRONIC		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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# Office Action Summary

Application No.

10/568,582

Examiner

MARK BLOUIN

Applicant(s)

KIKUKAWA ET AL.

Art Unit

2627

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

## Status

- 1) ☒ Responsive to communication(s) filed on 20 November 2008.
- 2a) ☐ This action is FINAL. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

## Disposition of Claims

- 4) ☒ Claim(s) 1-6 and 11-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-6 and 11-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

## Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

## Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

## Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-845)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## Detailed Action

### *Claim Rejections - 35 USC § 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claims 1-6 and 11-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shingai et al (USPub 2005/0041568) in view of Nishiuchi et al (US 2004/0223445).
3. Regarding Claim 1, Shingai et al shows (Figs. 1-6) an optical recording medium comprising: a substrate (11), a noble-metal oxide layer (12) provided on the substrate, a first dielectric layer (16) provided on a light-incidence plane side when viewed from the noble-metal layer and a second dielectric layer (13) provided on the side opposite to the light-incidence plane when viewed from the noble-metal oxide layer, the second dielectric layer containing ZnS or a mixture of ZnS and SiO<sub>2</sub> as a main component [0048], wherein the proportion of ZnS to the sum of ZnS and SiO<sub>2</sub> is set at a value from 60 mole % to 100 mole %, but does not show the noble metal as an oxide.

Nishiuchi et al shows [0078] the use of an oxide as well as several other materials to form a reproduction layer.

Shingai does not set forth the material combination of a noble metal oxide. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the noble metal layer of Shingai with the oxide of Nishiuchi et al through routine experimentation and optimization in the absence of criticality. More particularly, where the

general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation. In re Swain et al, 33 CCPA (Patents) 1250, 156 F.2d 239 70 USPQ 412; Minnesota Mining and Mfg. Co. v Coc, 69 App. D.C. 217, 99 F. 2d 986, 38 USPQ 213; Allen et al. v Coc, 77 App. D.C. 324, 135 F. 2d 11, 57 USPQ 136.

The rationale is as follows: One of ordinary skill in the art would have been motivated to provide the noble metal layer of Shingai with the oxide of Nishiuchi et al since it would be an art equivalent engineering choice of materials producing the same results.

4. Regarding Claim 2, Shingai et al shows (Figs. 1-6) an optical recording medium, further comprising, on the side opposite to the light-incidence plane when viewed from the second dielectric layer (13), a light absorption layer (14) and a third dielectric layer (15) arranged in this order when viewed from the second dielectric layer.
5. Regarding Claim 3, Shingai et al shows (Figs. 1-6) an optical recording medium, further comprising a reflective layer (12) provided between the substrate and the third dielectric layer (15).
6. Regarding Claim 4, Shingai et al in view of Nishiuchi et al shows (Figs. 1-6), all the features described, supra, but does not show an optical recording medium, wherein the noble-metal oxide layer contains platinum oxide (PtOx).

Shingai does not set forth the material of Platinum. However, it would have been obvious to one of ordinary skill in the art at the time the invention was made to provide the noble metal oxide layer of Shingai with the claimed materials through routine experimentation and optimization in the absence of criticality. More particularly, where the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable

ranges by routine experimentation. In re Swain et al, 33 CCPA (Patents) 1250, 156 F.2d 239 70 USPQ 412; Minnesota Mining and Mfg. Co. v Coc, 69 App. D.C. 217, 99 F. 2d 986, 38 USPQ 213; Allen et al. v Coc, 77 App. D.C. 324, 135 F. 2d 11, 57 USPQ 136.

The rationale is as follows: One of ordinary skill in the art would have been motivated to provide the noble metal oxide layer of Shingai with platinum since it is a substitution of noble metals and would provide the same effect.

7. Regarding Claims 5, 11, and 12, Shingai et al in view of Nishiuchi et al shows (Figs. 1-6) an optical recording medium, wherein the light absorption layer contains as a main component a material which can be represented by  $(\text{Sb}_a\text{Te}_{1-a})_{1-b}\text{MA}_b$  (wherein MA is an element other than antimony (Sb) and tellurium (Te),  $0 < a < 1$  and  $0 \leq b < 1$ ), and besides which is different from an intermetallic compound represented by  $\{(\text{GeTe})_c(\text{Sb}_2\text{Te}_3)_{1-c}\}_d\text{MB}_{1-d}$  (wherein MB is an element other than antimony (Sb), tellurium (Te) and germanium (Ge), c is 1/3, 1/2 or 2/3, and  $0 < d \leq 1$ ) (see [0052]).

8. Regarding Claims 6, 13, and 14, Shingai et al shows (Figs. 1-6) an optical recording medium, wherein a light-transmitting layer (18) having the light-incidence plane is further provided on the side opposite to the substrate (11) side when viewed from the first dielectric layer, the substrate is from 0.6 mm to 2.0 mm [0047] in thickness and the light-transmitting layer is from 10  $\mu\text{m}$  to 200  $\mu\text{m}$  in thickness [0047].

#### *Conclusion*

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mark Blouin whose telephone number is 571-272-7583. The examiner can normally be reached on M-F from 6:00 to 3:30 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Mr. Joe Feild, can be reached on 571-272-4090. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Mark Blouin/

Primary Examiner of Art Unit 2627

Mark Blouin  
Patent Examiner  
Art Unit 2627  
February 4, 2009